

Rating Methodology by Sector

Air Transportation

1. Business base

Air transportation is a critical component of the transportation infrastructure and the only means to cover very long distances quickly. However, the air transportation industry faces inherent difficulties in controlling major factors that can influence earnings, and consequently tends to experience significant short-term fluctuations in earnings. For these reasons, when examining ratings, we emphasize on how air transportation companies reduce their business risks. Specifically, we focus on measures for expanding sales, aircraft strategies, and cost cutting initiatives.

(1) Characteristics of the industry

(i) Market overview

The number of passengers using domestic and international scheduled flight operations has been almost unchanged since the 2000s. The number of passengers on domestic operations is not expected to rise significantly in the future, given the declining birthrate. With respect to international operations, the number of passengers leaving Japan is unlikely to grow noticeably, for the same reason. However, the number of inbound visitors should grow in the future. Contrary to its image of an international business, demand in the air transportation industry tends to be affected by domestic demographics and economic trends.

Passenger demand is highly sensitive to economic trends and fares. Fluctuations in international operations are particularly high. Starting in the 2000s, passenger demand has fallen sharply in many occasions, including 9/11, the outbreak of SARS in China, the collapse of Lehman Brothers, and the Great East Japan Earthquake. Passenger demand in domestic operations is also inevitably influenced by various events, although it is not as severely affected as international operations.

(ii) Competitive situation

Domestic operations are an oligopoly with the two major airlines, All Nippon Airways and Japan Airlines, because arrival and departure slots are restricted at Haneda Airport, the main domestic airport. However, reflecting difficulties in offering differentiated services, the air transportation industry is prone to price competition. Although price competition with emerging airlines has peaked, price competition involving the two major companies could start again when demand is contracting in the future. Moreover, the number of routes competing with bullet trains has been increasing with the expansion of the network of the bullet trains. Although the superiority of airplanes on long-distance routes remains unchanged, the number of routes that face increasing competition with bullet trains in

terms of punctuality and convenience is likely to increase in the future.

In international operations, competition among airlines has been escalating, given an increase in the number of new routes operated by overseas airlines as a result of the expansion of arrival and departure slots at Narita Airport and the internationalization of Haneda Airport. However, because Japanese passengers show a strong preference for Japanese airlines, and because the two major companies still control a large number of arrival and departure slots, the superiority of these two companies has not necessarily fallen significantly. Still, overseas airlines have been focusing on capturing passengers with a high unit value, such as business passengers, by improving their fleets and their services. Meanwhile, with a rapid increase in the entry number of overseas low cost carriers (LCC), downward pressure on fares has been rising on routes in which LCC are operating.

(iii) Cost structure

The air transportation industry bears a heavy burden of fixed costs to maintain its service network. In addition, it has a cost structure, within which the weight of fuel costs is high. Fuel costs are noticeably susceptible to market fluctuations. As a result, when the demand situation changes rapidly, mainly due to an external shock, earnings tend to fluctuate significantly in the short-term.

The main costs for airlines include fuel costs, labor costs, taxes, and public dues (including airport fees, landing fees, and fuel taxes), as well as maintenance costs and sales commissions. The Japanese airlines have a heavier burden of taxes and public dues, labor costs, and other costs than their overseas counterparts. As a result, they struggle to compete in terms of unit costs.

(iv) Risks related to policies

Because air transportation is regarded as an important part of the transportation infrastructure, governments provide a certain level of regulatory and financial support. However, there are also a number of regulations governing the air transportation industry and changes in policies could potentially affect the industry, either positively or negatively. Moreover, as airlines are expected to independently manage their operations as a private company, it is wise to avoid overestimating government support when business conditions take a turn for the worse.

(2) Important factors in market position and competitiveness

(i) Market position

In domestic operations, how many arrival and departure slots at Haneda Airport, a key source of earnings, airlines have secured is the critical issue. The two major Japanese airlines hold approximately 80% of the slots even after a slight decline in share as a result of the expansion of the airport in October 2010. In addition, Haneda Airport has been maintaining a high utilization rate in its international operations, which were resumed recently, and should bolster the utilization rate of domestic operations by improving the convenience of transit between domestic and international

flights.

In international operations, securing the number of arrival and departure slots at Narita Airport is also a critical issue. The two major Japanese airlines account for just under 40% of the slots. Meanwhile, international operations have been in the process of consolidating into three airline alliances, and competition among the alliances has been escalating. When it comes to the two major domestic airlines, All Nippon Airways belongs to the Star Alliance and Japan Airlines to oneworld. As a result, we focus on the competitiveness and the management policies of these alliances.

(ii) Initiatives to bolster income

Business passengers, unlike tourist passengers, tend to place more priority on convenience than on fares, and have a relatively high unit value. The rate of repeat trips by business passengers is often also high. For these reasons, airlines have been focusing on attracting business passengers through various initiatives to bolster the usability. They include improving services for passengers in classes with a high value seat, strengthening corporate sales activities, bolstering mileage services, and simplifying booking and boarding procedures. JCR looks at whether or not the airlines have been successful in steadily capturing business passengers through these initiatives.

It is also important for the airlines to maximize earnings by appropriately meeting demand fluctuations through supply and fare adjustments. On the supply front, the key is to mobilize the number of aircraft that is appropriate to meet the level of demand. On the fare front, the airlines are required to accurately make demand forecasts and understand the competitive situation, and to carefully set fares to ensure profitability while stimulating demand. Errors in aircraft mobilization or fare setting will lead to a loss of earnings opportunities. In this way, the business management capabilities of each airline will lead to differences in earnings strength.

(iii) Aircraft strategies

As aircraft are the source of earnings, aircraft strategies represent the business strategies of each air transportation company. Aircraft strategies are particularly critical for reducing fuel costs and executing growth strategies.

The introduction of new fuel-efficient aircraft can significantly reduce fuel costs. In particular, by replacing large aircraft with small and midsize aircraft with sufficient range for long-distance flights, fixed costs on long distance routes can be lowered, improving profitability per flight.

The introduction of new smaller planes is also useful for expanding routes. Aircraft that can operate at low cost will enable airlines to open new routes that were once considered unprofitable. Such aircraft are also expected to improve performance on less profitable routes.

(iv) Cost cutting and safe operations

Competition is likely to escalate in the future, mainly in international operations. The industry

also faces inevitable demand fluctuations, triggered by changes in the economic situation and other various other exogenous shocks. Consequently, it is important for the industry to continue to cut costs and improve its resilience to changes in the external environment. The most important issue in the air transportation industry is to ensure safe operations. We will continue to focus on the ability of the airlines to simultaneously cut costs and avoid problems related to safety.

2. Financial base

(1) Earnings strength

We place heavy weight on earnings strength from the perspective of the maintenance and expansion of the business. As earnings are susceptible to economic cycles and other events, however, we evaluate the companies based on their results over the economic cycle, and not only based on the performance for just one term. When significant changes in earnings level are seen, we analyze the factors that triggered the changes. If the factors are not part of the economic cycle or temporary developments, but represent sustained, structural changes, we reflect those changes in the ratings. In addition, it is important to achieve a high level of earnings when the economy is booming. However, we focus more on whether or not the companies have an earnings structure that is resilient to an economic slump, limiting a fall in earnings in the face of sluggish economic conditions.

Key financial indicators:

- Operating income
- Ordinary income
- EBITDA
- Ordinary income on sales
- ROA

(2) Cash flow

To introduce new aircraft and make investments in systems, air transportation companies continually raise funds and make investments. For this reason, it is necessary to confirm if investments made have produced results as planned, while also ensuring that the cash flows generated have been appropriately used to repay external debt.

Key financial indicators:

- Operating cash flows
- Free cash flows
- Ratio of interest-bearing debt to EBITDA
- Ratio of interest-bearing debt to operating cash flows

(3) Safety

Because the volatility of earnings of the air transportation companies is high, it is important to have

sound shareholders' equity to act as a buffer against earnings fluctuations. In addition, with a heavy burden of capital investments, industry players often have high levels of interest-bearing debt. They may also have many aircraft that are financed through off-balance sheet transactions. For these reasons, we focus not only on interest-bearing debt reported on the balance sheet, but also on debt from sources such as lease transactions.

Key financial indicators:

- Shareholders' equity
- Interest-bearing debt
- Interest-bearing debt and lease obligations
- Equity ratio
- Debt equity ratio

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